EPA Screening Assessment on Glyphosate in Honey

FEB 22ND, 2016 CONNOR WILLIAMS, HED

Pesticide	Residue Limit Source	Residue (ppm)	Residue (mg/g)	cPAD (mg/kg-day)	95% con (g/kg)	100% con (g/kg)	95th cEXP (mg ai/kg- bw)	100th aEXP (mg ai/kg- bw)	%cPAD (95th)	%cPAD (10
Glyphosate	Food Tolerance (Canada)	0.1	0.0001	1	0.26	4.61	0.000026	0.000461	0.002	0.0
-	Highest per Rubio et al., 2014	0.163	0.000163	1	0.26	4.61	0.00004238	0.00075143	0.00423	0.075
-	US Drinking Water Limit	0.7	0.0007	1	0.26	4.61	0.000182	0.003227	0.018	
	ion amount for %cPAD to reach 3	10% (in g/kg) in kg/kg		Total for 80 kg human adult (kg abs.)		Total for 15 kg child (kg abs.)				
ood Tolerance (Canada)		10000	10	3 800			190			
lighest per Rubio et al., 014	=	6134.969325	6.134969325	490.797	546	92	02459088			
JS Drinking Water Limit		1428.571429	1.428571429	114.285	1143	21	42857143			
Necessary consumpt	tion amount for %cPAD to reach	10% (in g/kg)	in kg/kg	Total for 80 kg huma	n adult (kg abs.)	Total for 1	5 kg child (kg abs.)	ı		
Food Tolerance (Canada)		1000	1	80			15			
lighest per Rubio et al., 2014	=	613.4969325	0.613496933	49.0797	546	1	FE2453 188			
JS Drinking Water Limit		142.8571429	0.142857143	11.4285	(14)	2	42857143			

Quick Summary

Dietary exposure based on the maximum recorded consumption by bodyweight (4.61 g/kg; 1-2 yrs old) AND highest residue concentration from *Rubio* et al (163 ppb) totals only **0.075%** of the cPAD for Glyphosate, or **0.000751 mg/kg**.

In real terms, as shown on the table, a 15 kg child would need to consume 9.2 kilograms of honey... daily... to get an exposure that was 10% of the cPAD (1.0 mg/kg-day).

As the weight of raw honey is approx. 1 teaspoon = 7g; $\frac{1}{2}$ cup = 169g; a 15 kg child consuming the maximum recorded consumption level of honey (4.61 g/kg) would consume 69.15 g absolute, or 133 times less than necessary to get to 10% of the cPAD.

With the same conversion factor, the 9.2 kg of honey necessary to get 10% of the cPAD equals approx:
 27.218 Cups of honey or 1.7 Gallons (US)... Every Day.

As a result, HED does not currently anticipate any serious risks to human health as a result of the normal consumption of honey with currently documented residue levels.